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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/520,733

01/10/2005

Ernst Reder

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9733

28862 7590 09/04/2008  
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EXAMINER

KURTZ, BENJAMIN M

ART UNIT

PAPER NUMBER

1797

MAIL DATE

DELIVERY MODE

09/04/2008

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/520,733	<b>Applicant(s)</b> REDER ET AL.	
	<b>Examiner</b> BENJAMIN KURTZ	<b>Art Unit</b> 1797	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 07 July 2008.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-10 and 13-26 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) 20, 23 and 24 is/are allowed.
- 6) ☒ Claim(s) 1-10, 13-19, 21, 25 and 26 is/are rejected.
- 7) ☒ Claim(s) 22 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 10 January 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)          | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

### **DETAILED ACTION**

Claims 1-10 and 13-26 are pending, claims 11 and 12 are cancelled.

In view of the appeal brief filed on 7/7/08, PROSECUTION IS HEREBY REOPENED. New grounds of rejection are set forth below.

To avoid abandonment of the application, appellant must exercise one of the following two options:

(1) file a reply under 37 CFR 1.111 (if this Office action is non-final) or a reply under 37 CFR 1.113 (if this Office action is final); or,

(2) initiate a new appeal by filing a notice of appeal under 37 CFR 41.31 followed by an appeal brief under 37 CFR 41.37. The previously paid notice of appeal fee and appeal brief fee can be applied to the new appeal. If, however, the appeal fees set forth in 37 CFR 41.20 have been increased since they were previously paid, then appellant must pay the difference between the increased fees and the amount previously paid.

A Supervisory Patent Examiner (SPE) has approved of reopening prosecution by signing below:

/Duane S. Smith/

Supervisory Patent Examiner, Art Unit 1797

9-2-08.

***Claim Rejections - 35 USC § 102 and 103***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

**1. Claims 1-4, 6-8, 16, 18 and 25 are rejected under 35 U.S.C. 102(b) as being anticipated by Baumann US 2 904 182.**

Claim 1, Baumann teaches a filter cartridge with a filter material comprising: a cartridge container (1) with a bottom wall (3) and a peripheral wall and a lid (30), which durably shuts the cartridge container, comprised of a lid bottom and a strip shaped lateral wall having a length measured parallel to the peripheral wall and having a linear vertical cross section along the entire length of the lateral wall, with a form matching according to its border, which is fitted in the inner side of the peripheral wall, wherein the lid bottom merges with the lateral wall in the direction of the peripheral wall along an inward curved edge section, wherein the curved edge section and the lateral wall join in a common wall section, tapering inwards, in a forming region, wherein a lower end of the common wall section is parallel to the cartridge container peripheral wall adjacent

thereto, and wherein the lateral wall has an upper wall section which is connected to and extends upward from the common wall section that is parallel to the common wall section lower end and cartridge container peripheral wall adjacent thereto (fig. 2).

Claims 2-4, 6-8, 16 and 18, Baumann further teaches in vertical cross section the lateral wall is a linear tangent line, and wherein the lateral wall is connected with the curved edge section tangentially (fig. 2); the common wall section forms a lower wall section of the lateral wall that includes the lower end (fig. 2); the curved edge section extends up to the inner end of the strip shaped lateral wall (fig. 2); the curved edge section spans an angle of 90 degrees (fig. 2); the lateral wall upper wall section extends upward from the common wall section at least up to a height of the lid bottom (fig. 2); and the upper wall section of the lateral wall and the curved edge section border on their outer side forming a ring space with a wedge shaped cross section (fig. 2).

Claim 25, Baumann teaches a filter cartridge with a filter material comprising: a cartridge container (1) with a bottom wall (3) and a peripheral wall and a lid (30), which durably shuts the cartridge container, comprised of a lid bottom and a strip shaped lateral wall having a length measured parallel to the peripheral wall and having a linear vertical cross section along the entire length of the lateral wall, with a form matching according to its border, which is fitted in the inner side of the peripheral wall, wherein the lid bottom merges with the lateral wall in the direction of the peripheral wall along an inward curved edge section, wherein the curved edge section and the lateral wall join in a common wall section, tapering inwards, in a forming region, wherein a lower end of the common wall section is parallel to the cartridge container peripheral wall adjacent

thereto, and wherein the lateral wall has an upper wall section which is connected to and extends upward from the common wall section that is parallel to the common wall section lower end and cartridge container peripheral wall adjacent thereto, wherein in the vertical cross section, the lateral wall is a linear tangent line, and wherein the lateral wall is connected with the curved edge section tangentially (fig. 2).

**Claims 13 and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Baumann '182.**

Claims 13 and 14, Baumann teaches the common wall section is connected to the peripheral wall by a threaded engagement but does not teach a weld or a glued connecting the common wall section and the peripheral wall. Gluing or welding are very well known methods of attaching lids to containers and would have been a simple matter of design choice to one of ordinary skill in the art to make the lid permanently attached to the container wall. [T]he use of a one piece construction instead of the structure disclosed in [the prior art] would be merely a matter of obvious engineering choice; *In re Larson* 144 USPQ 23 1952.

**Claims 5, 17 and 26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Baumann '182 in view of Verlinden US 3 952 904.**

Claims 5 and 17, Baumann teaches the curved edge section has a mean edge radius of curvature but does not teach the dimensions of the radius of curvature. The only difference between the prior art and the claimed invention is a recitation of relative dimension of the curved edge section. Absent some showing of secondary evidence that the claimed range would significantly differ from the prior art the claimed recitation is deemed a dimensional change. [W]here the only difference between the prior art and the claims was a recitation of relative dimensions of the claimed device and a device having the claimed relative dimensions would not perform differently than the prior art device, the claimed device was not patentably distinct from the prior art device, *Gardner v. TEC Systems, Inc.*, 220 USPQ 777 (1984). Also, the claimed dimensions are known in the prior art to Verlinden for use in a pressurized container and would have been obvious to one of ordinary skill in the art because the technique for improving a particular class of devices was part of the ordinary capabilities of one of skill in the art, *KSR International Co. v. Teleflex Inc.*, 82 USPQ2d 1385 (2007).

Claim 26, Baumann teaches a filter cartridge with a filter material, comprising: a cartridge container (1) with a bottom wall (3) and a peripheral wall and a lid (30), which durably shuts the cartridge container, comprised of a lid bottom and a strip shaped lateral wall having a length measured parallel to the peripheral wall and having a linear vertical cross section along the entire length of the lateral wall, with a form matching according to its border, which is fitted in the inner side of the peripheral wall, wherein the lid bottom merges with the lateral wall in the direction of the peripheral wall along an inward curved edge section, wherein the curved edge section and the lateral wall join in

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a common wall section, tapering inwards, in a forming region, wherein a lower end of the common wall section is parallel to the cartridge container peripheral wall adjacent thereto, and wherein the lateral wall has an upper wall section which is connected to and extends upward from the common wall section that is parallel to the common wall section lower end and cartridge container peripheral wall adjacent thereto and the curved edge section has a mean edge radius of curvature (fig. 2).

Baumann does not teach the dimensions of the radius of curvature. The only difference between the prior art and the claimed invention is a recitation of relative dimension of the curved edge section. Absent some showing of secondary evidence that the claimed range would significantly differ from the prior art the claimed recitation is deemed a dimensional change. [W]here the only difference between the prior art and the claims was a recitation of relative dimensions of the claimed device and a device having the claimed relative dimensions would not perform differently than the prior art device, the claimed device was not patentably distinct from the prior art device, *Gardner v. TEC Systems, Inc.*, 220 USPQ 777 (1984). Also, the claimed dimensions are known in the prior art to Verlinden for use in a pressurized container and would have been obvious to one of ordinary skill in the art because the technique for improving a particular class of devices was part of the ordinary capabilities of one of skill in the art, *KSR International Co. v. Teleflex Inc.*, 82 USPQ2d 1385 (2007).



**2. Claims 1-8, 13, 14, 16-18, 25 and 26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Vannoy et al. US 5 830 348 in view of Verlinden US 3 958 904.**

Claim 1, Vannoy teaches a filter cartridge with a filter material, comprising: a cartridge container (14) with a bottom wall (26) and a peripheral wall and a lid (38), which durably shuts the cartridge container, comprised of a lid bottom and a strip shaped lateral wall having a length measured parallel to the peripheral wall and having a linear vertical cross section along the entire length of the lateral wall, with a form matching according to its border, which is fitted at the inner side of the peripheral wall (fig. 1, col. 4, lines 8-17). Vannoy does not teach the lid bottom merges with the lateral wall in the direction of the peripheral wall along an inward curved section, tapering inwards, in a forming region.

Verlinden teaches a container (2) with a bottom wall (6) and a lid (3), which durably shuts the container, comprised of a lid bottom (13a) and a strip shaped lateral wall (13) having a length measured parallel to the peripheral wall and having a linear vertical cross section along the entire length of the lateral wall, with a form matching according to its border, which is fitted at the inner side of the peripheral wall, wherein the lid bottom merges with the lateral wall in the direction of the peripheral wall along an inward curved edge section, wherein the curved edge section and the lateral wall join in a common wall section, tapering inwards, in a forming region, wherein a lower end of the common wall section is parallel to the cartridge container peripheral wall adjacent

thereto, and wherein the lateral wall has an upper wall section which is connected to and extends upward from the common wall section that is parallel to the common wall section lower end and cartridge container peripheral wall adjacent thereto (fig. 1). It would have been obvious to one of ordinary skill in the art at the time the invention was made to use the lid structure as taught by Verlinden with the lid of Vannoy because the lid structure of Verlinden ensures an effective seal between the lid and container having a strong interconnection and an easy manufacture (col. 1, lines 50-65). Also, Verlinden demonstrates that this particular structure for a lid is known in the art, particularly when dealing with the problems of the present invention, mainly a pressurized container with a lid. Therefore, because the particular technique was recognized as part of the ordinary capabilities of one skilled in the art the claim would have been obvious, *KSR International Co. v. Teleflex Inc.*, 82 USPQ2d 1385 (2007).

Claims 2-8 and 16-18, Verlinden further teaches in vertical cross section the lateral wall is a linear tangent line, and wherein the lateral wall is connected with the curved edge section tangentially (fig. 1); the common wall section forms a lower wall section of the lateral wall that includes the lower end (fig. 1); the curved edge section extend up to the inner end of the strip shaped lateral wall (fig. 1); the curved edge section has a mean edge of curvature  $R$ , which satisfies  $R$  greater than  $5 \times S$ ,  $S$  being the thickness of the peripheral wall of the cartridge container (fig. 1); the curved edge section spans an angle of 90 degrees (fig. 1); the lateral wall upper wall section extends upward from the common wall section at least up to a height of the lid bottom (fig. 1);

the upper wall section of the lateral wall and the curved edge section border on their outer side forming a ring space with a wedge shaped cross section (fig. 1);

Claims 13 and 14, Vannoy further teaches a weld connects at least one section of the common wall section to the peripheral wall (col. 4, lines 8-17).

Claim 25, Vannoy teaches a filter cartridge with a filter material, comprising: a cartridge container (14) with a bottom wall (26) and a peripheral wall and a lid (38), which durably shuts the cartridge container, comprised of a lid bottom and a strip shaped lateral wall having a length measured parallel to the peripheral wall and having a linear vertical cross section along the entire length of the lateral wall, with a form matching according to its border, which is fitted at the inner side of the peripheral wall (fig. 1, col. 4, lines 8-17). Vannoy does not teach the lid bottom merges with the lateral wall in the direction of the peripheral wall along an inward curved section, tapering inwards, in a forming region.

Verlinden teaches a container (2) with a bottom wall (6) and a lid (3), which durably shuts the container, comprised of a lid bottom (13a) and a strip shaped lateral wall (13) having a length measured parallel to the peripheral wall and having a linear vertical cross section along the entire length of the lateral wall, with a form matching according to its border, which is fitted at the inner side of the peripheral wall, wherein the lid bottom merges with the lateral wall in the direction of the peripheral wall along an inward curved edge section, wherein the curved edge section and the lateral wall join in a common wall section, tapering inwards, in a forming region, wherein a lower end of the common wall section is parallel to the cartridge container peripheral wall adjacent

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thereto, and wherein the lateral wall has an upper wall section which is connected to and extends upward from the common wall section that is parallel to the common wall section lower end and cartridge container peripheral wall adjacent thereto and in vertical cross section the lateral wall is a linear tangent line, and wherein the lateral wall is connected with the curved edge section tangentially (fig. 1). It would have been obvious to one of ordinary skill in the art at the time the invention was made to use the lid structure as taught by Verlinden with the lid of Vannoy because the lid structure of Verlinden ensures an effective seal between the lid and container having a strong interconnection and an easy manufacture (col. 1, lines 50-65). Also, Verlinden demonstrates that this particular structure for a lid is known in the art, particularly when dealing with the problems of the present invention, mainly a pressurized container with a lid. Therefore, because the particular technique was recognized as part of the ordinary capabilities of one skilled in the art the claim would have been obvious, *KSR International Co. v. Teleflex Inc.*, 82 USPQ2d 1385 (2007).

Claim 26, Vannoy teaches a filter cartridge with a filter material, comprising: a cartridge container (14) with a bottom wall (26) and a peripheral wall and a lid (38), which durably shuts the cartridge container, comprised of a lid bottom and a strip shaped lateral wall having a length measured parallel to the peripheral wall and having a linear vertical cross section along the entire length of the lateral wall, with a form matching according to its border, which is fitted at the inner side of the peripheral wall (fig. 1, col. 4, lines 8-17). Vannoy does not teach the lid bottom merges with the lateral

wall in the direction of the peripheral wall along an inward curved section, tapering inwards, in a forming region.

Verlinden teaches a container (2) with a bottom wall (6) and a lid (3), which durably shuts the container, comprised of a lid bottom (13a) and a strip shaped lateral wall (13) having a length measured parallel to the peripheral wall and having a linear vertical cross section along the entire length of the lateral wall, with a form matching according to its border, which is fitted at the inner side of the peripheral wall, wherein the lid bottom merges with the lateral wall in the direction of the peripheral wall along an inward curved edge section, wherein the curved edge section and the lateral wall join in a common wall section, tapering inwards, in a forming region, wherein a lower end of the common wall section is parallel to the cartridge container peripheral wall adjacent thereto, and wherein the lateral wall has an upper wall section which is connected to and extends upward from the common wall section that is parallel to the common wall section lower end and cartridge container peripheral wall adjacent thereto and the curved edge section has a mean edge of curvature  $R$ , which satisfies  $R$  greater than  $5 \times S$ ,  $S$  being the thickness of the peripheral wall of the cartridge container (fig. 1). It would have been obvious to one of ordinary skill in the art at the time the invention was made to use the lid structure as taught by Verlinden with the lid of Vannoy because the lid structure of Verlinden ensures an effective seal between the lid and container having a strong interconnection and an easy manufacture (col. 1, lines 50-65). Also, Verlinden demonstrates that this particular structure for a lid is known in the art, particularly when dealing with the problems of the present invention, mainly a pressurized container with

a lid. Therefore, because the particular technique was recognized as part of the ordinary capabilities of one skilled in the art the claim would have been obvious, KSR International Co. v. Teleflex Inc., 82 USPQ2d 1385 (2007).

**3. Claims 9, 10 and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Baumann '182 in view of Watts US 3 021 974 or over Vannoy '348 in view of Verlinden '904 and further in view of Stifano US 4 109 820.**

Claims 9 and 19, Baumann and Vannoy in view of Verlinden teach the filter cartridge of claim 1 but do not teach a back up ring arranged on the lid. Stifano teaches a cartridge having a lid further comprising a back up ring arranged on the lid (col. 3, lines 32-34), the back up ring has an inner wall comprising a ring opening (25) an outer lateral wall in contact with the lid lateral wall and a plurality of radial reinforcing ribs (14) extending between the back up ring inner wall and the back up ring outer lateral wall (fig. 5). It would have been obvious to one of ordinary skill in the art at the time the invention was made to use the back up ring of Stifano because the ring redirects the pressure within the container to the walls and makes a stronger seal (col. 3, lines 46-56).

Claim 10, Stifano further teaches at least a bottom contour of the back up ring is connected to the back up ring inner wall and the back up ring outer lateral wall and is built such that the bottom contour is complementary to an outer contour of the lid (fig. 6).

**4. Claim 21 is rejected under 35 U.S.C. 103(a) as being unpatentable over Vannoy '348 in view of Verlinden '904 and Stifano '820.**

Claim 21, Vannoy further teaches the lid includes a connecting tube at its center and Stifano also teaches the lid including a connecting tube (25) accessible through the ring opening of the back up ring (Vannoy (fig. 1), Stifano (fig. 6)).

**5. Claim 15 is rejected under 35 U.S.C. 103(a) as being unpatentable over Vannoy '348 in view of Verlinden '904 and Gizowski et al. US 2001/0000894 A1.**

Vannoy further teaches the weld is a laser weld but does not teach the material of the cartridge is transparent to laser light. Gizowski teaches the material of the cartridge container is transparent to laser light and at least the material of the lateral wall of the lid is absorptive to laser light (paragraph 3). It would have been obvious to one of ordinary skill in the art at the time the invention was made to use the materials as taught by Gizowski because it enables increase manufacturing rates and provides a higher quality fluid seal (paragraph 7).

***Response to Arguments***

6. Applicant's arguments with respect to claims 1, 25 and 26 have been considered but are moot in view of the new ground(s) of rejection.

***Allowable Subject Matter***

7. Claim 22 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Claims 23, 24 and 20 are allowed.

***Conclusion***

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to BENJAMIN KURTZ whose telephone number is (571)272-8211. The examiner can normally be reached on Monday through Friday 8:00am to 4:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Sample can be reached on 571-272-1376. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.



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Benjamin Kurtz  
Examiner  
Art Unit 1797

/Benjamin Kurtz/  
Examiner, Art Unit 1797  
8/29/08

/Krishnan S Menon/  
Primary Examiner, Art Unit 1797

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Supervisory Patent Examiner, Art Unit 1797